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a conductive layer deposited on at least a portion of a surface of the capillary element, the conductive layer extending up to the second end of the capillary element.

- 3. (New) The microfluidic device of claim 2, wherein the conductive layer comprises a conductive stripe along a portion of a length of the capillary element.
- 4. (New) The microfluidic device of claim 2, wherein the conductive layer comprises a continuous layer around a circumference of the capillary element.
- 5. (New) The microfluidic device of claim 2, wherein the capillary element is attached to the body structure by the first end being inserted into an aperture in the body structure.
- 6. (New) The microflylidic device of claim 5, wherein the conductive layer is deposited along a portion of a length of the capillary element that extends to a point proximal to but not up to the first end of the capillary element.
- 7. (New) The microfluidic device of claim 2, wherein the capillary element is substantially rectangular.
- 8. (New) The microfluidic device of claim 7, wherein the capillary channel in the capillary element is substantially colinear with the at least one microscale channel disposed in the body structure.
- 9. (New) The microfluidic device of claim 7, wherein the capillary channel in the capillary element is substantially perpendicular to the at least one microscale channel disposed in the body structure.

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